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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,577	12/21/2001	Peter Schertl	Mo6856/LeA 33,769	1797

157 7590 07/21/2004  
BAYER MATERIAL SCIENCE LLC  
100 BAYER ROAD  
PITTSBURGH, PA 15205

EXAMINER
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RABAGO, ROBERTO

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 07/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/019,577	Applicant(s) SCHERTL ET AL.	
	Examiner Roberto Rábago	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-11, 13-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 7, 10, 11, 13-19, 21 and 23 is/are rejected.
- 7) ☒ Claim(s) 2, 4, 8, 9 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/17/2004 has been entered.

Prior rejections and objections are withdrawn in view of amendment.

### ***Claim Objections***

2. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The inclusion of vanadium is not within the scope of the parent claim, and the remaining species do not narrow the scope of metals as recited in the parent claim.

### ***Claim Rejections - 35 USC § 102***

3. Claims 5, 10, 16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Granel et al. (US 5,869,583).

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The reference discloses an initiating system comprising a radical generator and a transition metal complex (col. 2, lines 16-64). Examples 1-37 provide numerous homo- and copolymerizations comprising nickel complexes comprising both a bidentate ligand and a halide ligand, and therefore includes all claimed limitations.

4. Claims 5, 7 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Chabert et al. (US 3,985,718).

The reference discloses in Example 2 ethylene polymerization in the presence of a three-component composition including ferric acetylacetonate, lauroyl peroxide and vanadyl acetylacetonate (acting as a cocatalyst), and therefore includes all claimed limitations.

5. Claims 5, 7 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Foucher et al. (US 5,744,560).

The reference shows in Examples V and IX styrene polymerization in the presence of a composition comprising Ni or Co with two hfac ligands, benzoyl peroxide and TEMPO (acting as a cocatalyst) and therefore includes all claimed limitations.

***Claim Rejections - 35 USC § 103***

6. Claims 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granel et al. (US 5,869,583).

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The only components missing from the reference disclosure as discussed in item 3 above is the use a peroxide as the radical producer. However, the reference suggests the use of such compounds at col. 6, lines 54-63, providing suitable motivation for those of ordinary skill in the art to use a peroxide in the initiator compositions shown in the working examples, with reasonable success expected.

7. Claims 1, 3, 10, 11, 13-15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chabert et al. (US 3,985,718).

The only components missing from the reference disclosure as discussed in item 4 above is the making of a copolymer of the recited monomers and the making of a molded article. Regarding copolymerization, patentee discloses and claims copolymerization including polar monomers and olefins (col. 4, line 57 through col. 5, line 2; claim 1), and specifically names several species within the claimed scope, including vinyl chloride, ethylene and propylene. One of ordinary skill in the art would be motivated to make copolymers of the claimed monomers using the methods shown in the working examples because patentee has suggested such copolymerizations, with reasonable success expected. Regarding the making of moldings, the reference is concerned primarily with the details of polymerization, and has not set forth any specifically recommended applications for the polymers produced; however, official notice is taken the making of moldings using the general types of polymers disclosed in the reference is entirely conventional. Therefore, one of ordinary skill in the art would

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be motivated to make at least the most simple types of moldings with the polymers disclosed and suggested in the reference because such use is conventional.

8. Claims 1, 3, 10, 11, 13-15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foucher et al. (US 5,744,560).

The only components missing from the reference disclosure as discussed in item 5 above is the making of a copolymer of the recited monomers and the making of an adhesive. Regarding copolymerization, patentee specifically suggests copolymers such as poly-(styrene-butadiene) and poly-(styrene-isoprene) (col. 12, lines 43-52), providing one of ordinary skill in the art motivation to make such copolymers using the methods disclosed in the working examples. Regarding the making of adhesives, patentee recommends this use at col. 2, line 63, providing one of ordinary skill in the art motivation to make adhesives of the disclosed polymers. Reasonable success would be expected when using these additional or alternative embodiments because patentee has recommended them.

#### ***Allowable Subject Matter***

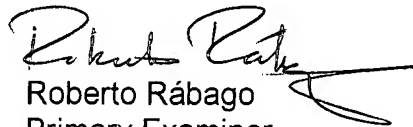
9. Claims 2, 4, 8, 9 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The references cited on this record have not disclosed these particular cocatalysts or the specified insertion polymerization method.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Roberto Rábago  
Primary Examiner  
Art Unit 1713

RR  
July 19, 2004